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**Muninder**(10) **Pub. No.: US 2014/0314273 A1**(43) **Pub. Date: Oct. 23, 2014**(54) **METHOD, APPARATUS AND COMPUTER  
PROGRAM PRODUCT FOR OBJECT  
DETECTION**(52) **U.S. Cl.**  
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(2013.01)USPC ..... **382/103**(75) Inventor: **Veldandi Muninder**, Bangalore (IN)(73) Assignee: **Nokia Corporation**, Espoo (FI)(57) **ABSTRACT**(21) Appl. No.: **14/123,840**(22) PCT Filed: **Apr. 5, 2012**(86) PCT No.: **PCT/FI2012/050351**

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In accordance with an example embodiment a method and apparatus is provided. The method comprises detecting presence of an object portion in at least one sub-window in an image based on a first classifier. The first classifier is associated with a first set of weak classifiers. A set of sample sub-windows is generated corresponding to the at least one sub-window by performing at least one of a row shifting and column shifting of the at least one sub-window. A presence of the object portion in the set of sample sub-windows is detected based on a second classifier. The second classifier is associated with a second set of weak classifiers. The presence of the object portion is determined in the at least one sub-window based on the comparison of a number of sample sub-windows in the set of sample sub-windows comprising the object portion with a predetermined threshold number.

